GEOLOGIC AND GEOMORPHIC FEATURES RELATED TO LANDSLIDING MATTOLE RIVER WATERSHED, HUMBOLDT AND MENDOCINO COUNTIES, CALIFORNIA

Melange and (or) folded argillite of King Peak - Thin-bedded, highly folded, predominantly argillitic sequences that exhibit subdued, irregular topography lacking a well-incised system of sidehill drainages. Highly folded, broken formation of King Peak -Thick- to thin-bedded arkosic sandstone and calcareous argillite that exhibit sharp-crested topography with well incised but irregular sidehill drainages.

Limestone - Red to white, locally with planktic or benthic foraminifers; present locally as melange blocks, and as

Sheared and highly folded mudstone - Includes minor rhythmically interbedded sandstone, locally with lenses of conglomerate. Exhibits irregular topography lacking a well-incised system of sidehill drainages. Highly folded, broken mudstone, sandstone, and conglomeratic sandstone - Exhibits topography with sharp ridge-

Highly folded, little-broken sandstone, conglomerate, and mudstone - Exhibits sharp-crested topography with a Ycgl Conglomerate - Polymict, well-rounded clasts that include volcanic, granitic, and less common metaclastic rocks. Melange - Predominantly penetratively sheared, locally tuffaceous, scaly meta-argillite and less abundant blocks of

cb1 Broken formation - Bedded to massive, locally folded, rarely conglomeratic metasandstone and meta-argillite, with minor White Rock metasandstone (Paleocene and/or Late Cretaceous) - Arkosic metasandstone and minor meta-argillite,

Basaltic rocks (Cretaceous and Jurassic) - Includes pillowed and non-pillowed flows, flow breccias, submarine tuff, and

Watershed boundary Road, street or trail ▲ City or town

1) The landslides and geomorphic features were mapped from 1984 WAC aerial photographs, nominal scale 1:31,680, and 2000 WAC aerial photographs, nominal scale 1:24,000. Field verification of landslide and geomorphic features was very limited and mapping relied primarily on interpretation of aerial photographs. 2) The geology depicted on this map was modified from 1:100,000-scale source data (McLaughlin and others, 2000). Although the geology has been presented on this map at a scale of 1:24,000, the detail and accuracy of the bedrock and structural data are limited to the spatial resolution of the 1:100,000 scale in which

4) Landslides shown on this map have been divided into groups based on the clarity of their morphology and inferred type of movement. The landslides are also classified according to the certainty of their existence as determined by analysis of aerial photographs. The various landslide designations are not intended to, nor should they be interpreted to imply, the relative stability of slopes involved. Please see Plate 2 for relative

5) The scale of this map limits the delineation of some features, and the map should not be substituted for

Historical mapping added directly to the Mattole River Watershed database is referenced in the electronic database with a citation to the North Coast Watersheds Mapping, digital compilation DMG CD 99-002 (DMG,

9) Digital data shown on this map as well as additional landslide and fluvial geomorphology data are available from the following sources: on the CGS website at www.conservation.ca.gov/cgs, on compact disc

California Division of Mines and Geology, 1999, North Coast Watersheds mapping, digital compilation DMG CD 99-002, California Department of Conservation, Division of Mines and Geology. McLaughlin, R.J., Ellen, S.D., Blake, M.C., Jr., Jayko, A.S., Irwin, W.P., Aalto, K.R., Carver, G.A. and Clarke,

Spittler, T.E., 1984, Geology and geomorphic features related to landsliding, Briceland, Buckeye Mountain, Capetown, Honeydew, and Taylor Peak 7.5' quadrangles, Humboldt County, California: California Division of Mines and Geology Open-File Reports 84-10, 84-37, 84-34, 84-11, and 84-36,

WAC Corporation, Inc., 2000, Flight WAC-00-CA: roll 4, frames 1-15, 83-96, 164-167 and 173-175; roll 6, frames 1-21 and 95-113; roll 7, frames 1-15, 48-63, 88-104, 135-148, 165-177, 191-201 and 213-219; roll 9, frames 176-191; black and white, vertical, nominal scale 1:24,000, dated 3-31-00.

WAC Corporation, Inc., 1984, Flight WAC-84C: roll 21, frames 42-54, 95-109, 131-142, 161-169, 185-193 and 203-217; roll 24, frames 64-78 and 160-171; roll 25, frames 75-85; black and white, vertical, nominal



